WILDERNESS EVALUATION

Blue Slide - 617035

14,115 acres

OVERVIEW

History

This area was inventoried and analyzed under RARE II as area number 6035 and was not recommended for wilderness. The area was not considered for wilderness under the Washington State Wilderness Act of 1984 legislative process. Roading and timber harvest since 1990 reduced the total roadless acreage and has fragmented the original unit. Much of the eastern portion of the original roadless area can no longer be considered a viable portion of the Blue Slide Potential Wilderness Area (PWA).

The 2006 inventory removed approximately 4,285 acres from previous inventory due to nonconforming uses such as road construction and logging, and private land; 214 acres were added to the previous inventory as they met the criteria for a roadless area as described in Forest Service Handbook (FSH) 1909.12, Chapter 70. The following chart depicts the 1990 Wenatchee National Forest Land and Resource Management Plan for the 2007 potential wilderness area.

Table 1--Management area percentages (rounded)

Wenatchee National Forest			
GF	RE2B	SI2	ST2
34%	21%	1%	44%

Location and Access

The area is a short distance east of the Goat Rocks Wilderness in Yakima County on the Naches Ranger District. The Yakama Indian Reservation and some Washington State Department of Natural Resources lands lie to the south.

The area is readily accessible by primitive roads and trails but main access is via U.S. Highway 12 and the Tieton and South Fork Tieton Roads.

Geography and Topography

This area generally lies below and to the north of the basalt cliffs along Divide Ridge. The basalt cliffs and the massive talus slopes below are very distinct. Below the talus slides the topography is somewhat undulating and bumpy in some places, indicating old landslide activity. There are also some areas with deeply incised canyons that have very steep side slopes that give strong evidence of rapid down-cutting.

Elevations range from 3600 to 7000 feet.

Current uses

The current use is for dispersed recreation. There is an established 4x4 trail system within the PWA. The Divide Ridge Trail runs along the ridge along the southern edge of the area and a network of system 4x4 trails connect to the Divide Ridge Trail in the western portion. Over 30 miles of motorized trails are currently maintained. Big game hunting is also a popular activity.

Appearance and Surroundings

The area has high visual variety in rock forms and vegetation, and low to moderate variety in water forms (lakes and streams). The area has steep, rugged ridge tops with sparse vegetation on the upper slopes and a highly textured vegetative pattern throughout. The drainage bottoms are rather densely vegetated. Fall color occurs on parts of the upper slopes. Some basalt formations are present on ridges and ridge tops.

The area is primarily foreground and middle ground when viewed from the South Fork Tieton Road, trails that lead from the valley floor to Divide Ridge, and the Divide Ridge Trail. Middle ground and backgrounds are viewed from White Pass Highway (Hwy 12) and Goat Rocks Wilderness.

The Blue Slide area is bounded on the south by the Yakama Indian Reservation and on the north by the upper parts of the South Fork Tieton drainage. The area contains many basaltic rock bluffs and talus slopes. There are no major lakes or streams, but there are many springs scattered along the main ridge. Blue Slide, for which the area is named, is a large land slip and is visible from the South Fork of the Tieton drainage.

Key attractions

The main features are Divide Ridge and the associated rock bluffs and talus slopes. Four-by-four trails in this area connect to a larger system.

CAPABILITY FOR WILDERNESS

Level of Natural and Undeveloped Environment

While the area retains substantial acreage, the opportunities for solitude are extremely limited due to topography, visibility of human activity from most locations within the area, and a relatively narrow land connection between the two larger lobes of this potential wilderness area. Forest roads and Highway 12 are visible from much of the area along with numerous nearby harvest units.

The Blue Slide PWA is partially impaired by light pollution from the Yakima and Naches area. The western portion of the PWA (71 percent of the PWA) rates a Class 2 on the Bortle Scale, whereas the eastern portion (29 percent of the PWA) rates as a Class 3. A Class 2 Typical Truly Dark Sky represents the darkest skies viewed in the continental United States. The summer Milky Way is highly structured to the unaided eye. Any clouds in the sky are visible only as dark holes or voids in the starry background. No light domes from population centers are visible. A Class 3 Rural Sky has some indication of light pollution on the horizon. Clouds may appear faintly illuminated in the brightest parts of the sky near the horizon, but are dark overhead. The Milky Way still appears complex. Light

domes from population centers may appear on the horizon (10-15 degrees above horizon). Visual observing is still relatively unimpaired. Time lapse photography could be impaired by light pollution.

Water quality data is not available for most of the PWA, however due to the relatively low level of disturbance water quality is assumed to be high. A portion of Fish Creek is classified by the Washington State Department of Ecology as Category 1, which means the segment met tested standards.

There are no surveyed noxious weed species within this PWA.

Level of Outstanding Opportunities for Solitude, or Primitive and Unconfined Recreation

The primary challenge of the Blue Slide area is climbing the face of Divide Ridge and traversing Blue Slide itself. This could be very challenging as well as dangerous for the inexperienced.

This area has well-established 4x4 jeep trails throughout. These trails connect to a larger network of 4x4 trails in the adjacent areas to the north and east. There are some opportunities for primitive recreation experiences although all the trails have been heavily impacted by motorized use. Big game hunting is generally limited to day use due to the rugged terrain. The area is well-known for spectacular long distance views from Divide Ridge.

Opportunities for solitude would be very limited due to the narrow shape and nearby roads.

Special Features

The area contains northern spotted owl habitat and there are known nest sites. A peregrine falcon nest site has also been located. This area also provides potential habitat for the gray wolf, source habitat for wolverine, and is in the peripheral portion of the Canada lynx recovery area.

The Blue Slide unit encompasses a portion of a major travelway used by ancestors of the Yakama Indians to journey between their village sites in the Yakima and Naches basins to areas in the upper Tieton Basin. Historical themes include use of the area for sheep grazing, fur trapping, and fire detection.

The Blue Slide, a large land slip for which this PWA is named, is a unique geological feature.

The area includes one sensitive plant species: clustered ladyslipper (*Cypripedium fasciculatum*).

Manageability of Boundaries

The Blue Slide PWA is dominated by Divide Ridge. While the southern boundary is generally defined by the ridgeline, the Yakama Indian Reservation boundary intersects this topographic feature in several places. There is also a relatively narrow roadless connection (approximately ½ mile) in the vicinity of Blue Lake that connects the two larger area lobes. The northern boundary generally cuts across drainages, ridges, and topographic contours.

AVAILABILITY FOR WILDERNESS

Recreation

Motorized trails, primarily 4x4 and ATV trails, currently exist with this potential wilderness area and connect to a network of trails to the north and east. This motorized use is relatively low use but well established and has a devoted following due to the extremely technical and steep trails. The area has been featured in 4x4 magazines, and was one of the earliest areas developed for use by 4x4 users following World War II. Wilderness designation would preclude motorized use and would affect a larger area due to connections to the larger network of trails.

Tourism marketing in the Yakima and Naches vicinity emphasizes agro-tourism and visiting wineries. The Naches Valley Chamber of Commerce website portrays this area as a place that offers scenic drives on Highways 410 and 12, snow skiing, river rafting, hiking, hunting, snowmobiling, and bird-watching. Links are provided to Forest Service web-based information. The Blue Slide PWA is not directly promoted.

The area does attract 4x4 users from throughout the state. It is less likely to attract tourism-based hiker use due to the lack of single track trails.

Table 2--Miles of recreation trails

Motorized Trails	Non-motorized Trails	Snowmobile Trails
32	0	1

Wildlife

The area is summer range for elk and deer herds. Black bear, grouse, and a number of other species utilize the area. There is northern spotted owl habitat and there are known nest sites. The owl habitat in dry and mesic forest may require future mechanical treatment in order to preserve sustainability. There is a peregrine falcon nest site within the area. This area also provides potential habitat for the gray wolf, source habitat for wolverine, and is in the peripheral portion of the Canada lynx recovery area.

The PWAs provide varying levels of habitat for focal wildlife species. To evaluate the habitat these areas provide, the following information was provided: the focal species emphasized in the area, the amount of habitat for each focal species, the priority ranking for the habitat (based on conservation assessments and recovery plans), and the proportion of the total habitat available on the Forest that is within the PWA.

Table 3--Availability of habitat for federally listed Threatened and Endangered wildlife species and R6 Focal Species

Wildlife Species	Acres Habitat	Habitat Priority Ranking (1=high, 2-mod, 3=low)	%Total Forest Habitat In Evaluation Area
Canada lynx	1,067	3	1
Wolverine	7,521	2	1
American Marten	2,876	1	1

A key issue relative to the sustainability of wildlife habitats is the identification of the amount of dry forest that is in a late-successional habitat area (LSHA). LSHAs that occur in dry forests can be at high risk of high severity wildfire, insects and disease that reduce the sustainability of the late-successional habitats. Active management such as prescribed fire and thinning may be needed to restore these habitats and enhance their sustainability.

Table 4--Acres of dry forest habitats present within the evaluation area and within a late-successional habitat area

Late Successional Habitat Area	Acres of Dry Forest
Tieton	Approx. 5,000

Water and Fish

The Blueslide proposed PWA is divided between three sub-watersheds: South Fork Tieton, lower Tieton, and upper Cowiche (6th HUCs). The South Fork Tieton sub-watershed covers 51,811 acres, with 89 percent of that acreage managed by the U.S. Forest Service. The 12,706 acres of proposed PWA in the South Fork equals 25 percent of the subwatershed. Stream reach conditions in the South Fork Tieton subwatershed that respond to natural and human-caused disturbances were evaluated as fair. The collected stream data values were lower than expected values measured in high functioning stream habitat elsewhere on the Okanogan and Wenatchee National Forest. Subwatershed vegetation conditions were somewhat altered from expected natural forest conditions; analyzed road effects were moderate. Vegetation condition and road effects considered cumulatively were rated fair. When vegetation condition and road effects were combined with measured stream responses to summarize overall subwatershed condition, this subwatershed was rated fair.

The 1072 acres of PWA in the lower Tieton River equals two percent of the 70,412-acre sub-watershed (6th HUCs). In the lower Tieton, 65 percent of the subwatershed is managed by the U.S. Forest Service. Stream reach conditions in the lower Tieton subwatershed that respond to natural and human caused disturbances were evaluated as fair. The collected stream data values were lower than expected values measured in high functioning stream habitat elsewhere on the Okanogan-Wenatchee National Forest. Subwatershed vegetation conditions were altered from expected natural forest conditions; analyzed road effects were substantial. Vegetation condition and road effects considered cumulatively were rated poor. When vegetation condition and road effects were combined with measured stream responses to summarize overall subwatershed condition, the lower Tieton was rated fair.

The 340 acres of the PWA in the 24,240-acre upper Cowiche is one percent of that subwatershed (6th HUCs). In the upper Cowiche, only 2 percent of the subwatershed is managed by the U.S Forest Service. When compared against unmanaged subwatersheds in good condition on the Okanogan-Wenatchee National Forest, some vegetation condition has changed from expected condition and road density is moderate for Upper Cowiche subwatershed. Considering changes in vegetation and road density in combination, this subwatershed was rated fair. Stream reach data has not been collected in sufficient quantity for analysis; therefore, watershed conditions have not been evaluated.

Within the South Fork Tieton subwatershed are three drainages with westslope cutthroat trout: Short, Dirty, and Spruce Creek. All three have functioning populations. Discovery Creek, another stream in South Fork Tieton, also has westslope cutthroat, although the status of the population is unknown. Each of these streams has bull trout rearing in their lower segments. The South Fork Tieton is considered a spawning area for bull trout.

The Bureau of Reclamation was granted 1st Form Withdrawal on portions of Section 28 and 30, T. 14 N., R. 15 E., WM. This granting was a result of an executive order dated August 8, 1907, called the Tieton Project. The withdrawn area presumably was considered as a reservoir site since the project area traverses the Tieton River.

Past records for stream discharge are available for the Tieton, although the gauging station is no longer active. There are no official snow survey sites within the PWA. Estimates of annual average snow packs in the higher elevations are 150 inches. Most of the water derived from this PWA and the nearby Goat Rocks Wilderness is utilized for irrigation needs in the Yakima Valley. Other water usage is considered to be minor including future hydroelectric power generation at Rimrock Dam, which would be generated incidental to water releases for irrigation and/or flood control.

The Blueslide PWA has a water source protection area totaling 4,261 acres that contributes to a community water system for the City of Yakima Water Division.

Range

About 90 percent of this potential wilderness area is within the existing Tieton Cattle Allotment (active). The remaining 10 percent is either part of the Conrad Meadow Cattle Allotment (active) or a part of the South Fork Tieton Recreation Stock Allotment which is an inactive allotment (recreation stock allotments are not depicted in Table 5, as they are an annual approvals for recreation purposes and do not fall under the commercial cattle and sheep grazing permits). The grazing resources potential is being realized through existing allotment plans.

Table 5--Percentage of Grazing Suitability Areas and Current Allotments

Percent Area Suitable for Cattle Grazing	Percent Area Currently in Cattle Allotments	Percent Area Suitable for Sheep Grazing	Percent Area Currently in Sheep Allotments
6	68	9	0

Vegetation and Ecology

Grand fir is probably the most common species in this predominately north facing steep area, north of Divide Ridge. Lodgepole pine, western larch, and Douglas-fir are major species at lower elevations. Most of the non-timbered areas are rock cliffs or active land slides. Some dry, shallow meadows and wet areas occur at the base of Divide Ridge. Jumpoff Meadow is one of the larger sedge, water and grass openings.

The area lies within the 20-60 inch rainfall zone with an estimated 50 percent of the annual moisture falling as snow.

Primary tree species include:

- **Lower Elevations:** Ponderosa pine, Douglas-fir, grand fir and western larch.
- **Upper Elevations:** Subalpine fir, mountain hemlock, lodgepole pine and whitebark pine

Successional stages are generally late-and mid-successional.

Non-forest areas contain cliffs, rocky areas, scattered mesic and wet meadow, grassland and big sagebrush shrublands. Much of the nearby area has been roaded and harvested for timber from the 1970s to the early 1990s.

With wilderness recommendation, options to utilize mechanical treatments to manage vegetation would be precluded. Generally, the priority for restoration treatments occurs within the wildland urban interface (WUI) or within the dry and mesic forest groups. Because WUI represents none of the potential wilderness area, the ability to conduct restorative treatments is not a concern. The concern is increased somewhat by recognizing that dry and mesic forest occupies nearly half of the area.

Timber Harvest Suitability

The underlying criteria for determining timber harvest suitability are found in the Forest and Rangeland Renewable Resources Planning Act of 1974, 36CFR219.12, and Forest Service Handbook 1909.12, Chapter 60.

For the Colville and Okanogan-Wenatchee National Forests, the general criteria for timber suitability that will be used for timber harvest suitability are:

- Is it forest land (10 percent crown cover minimum, productivity >20 ft^3/ac/yr).
- The area has not been withdrawn from timber harvest or production.
- Soil, slope, or other watershed conditions will not be irreversibly damaged (based on soil attributes for erosion, instability, or compaction potential, slopes >65 percent, and certain land types)
- Reforestation can be assured within five years (lack of shallow soils, low frost heave potential, low surface rock, plant community type, certain land types, and elevation <5,500 feet)
- Economic and technologic viability (<0.5 miles from existing transportation system, species value or condition, volume availability, logging systems)

In consideration of all the criteria for determining timber harvest or timber production suitability and not just the fact that harvestable species can grow at a specific location, it appears this PWA does not have conditions that pass all the criteria. The main criterion for failure is that unacceptable resource impacts would likely occur due to road construction activities. This does not preclude helicopter operations that could fly material over sensitive areas to adjacent road systems. However, in most if not all cases helicopter logging and the associated expenses (such as manual slash treatments) would not be an economically viable option.

Table 6--Stand data percentages

Suitable for Timber Harvest	Forest Groups		WUI	
0%	Parkland	6%	Total WUI	0%
	Cold Dry	6%	WUI in Dry and Mesic Forest	0%
	Cold Moist	36%		
	Mesic	10%		
	Dry	39%		
	Non-forest	3%		

Fire

Annual fire occurrence is low with most fires started by lightning. Twenty-five years of fire suppression history shows 33 fires occurring in and around the area. Only the Dome Peak Fire (2001) at 268 acres has escaped initial attack. All other fires have been suppressed at five acres or less. This area is best portrayed as Fire Regime 3. This describes a fire return interval (the average time between naturally occurring fires burning any piece of ground) of 35 to 100 or more years. The landscape would have experienced a mosaic of fire severity. Within this fire regime, the majority is in Condition Class 3. In this condition, the vegetation composition structure and fuels have a high departure from the natural and predispose the system to high risk of loss to fire of key ecosystem components.

Insects and Disease

The Wilderness Act of 1964 allows for the control of insects and disease, but taking such actions in wilderness is rare. Forest Service wilderness policy (Forest Service Manual 2324.11) directs the agency "to allow indigenous insect and plant diseases to play, as nearly as possible their natural ecological role". Policy also directs the agency to "protect the scientific value of observing the effect of insects and disease on ecosystems and identifying genetically resistant plant species", and finally, "to control insect and plant disease epidemics that threaten adjacent lands or resources."

The Darland Mountain portion of this PWA is comprised of a parkland forest group and is known to support stands of whitebark pine. Due to a combination of anthropogenic causes (introduced white pine blister rust, global warming, and fire suppression leading to high severity wildfires) coupled with predation from native mountain pine beetles, whitebark pine stands are at risk across their range. These whitebark pine stands are of inherent value as a plant community, for providing important habitat for wildlife including the federally listed grizzly bear, and for their aesthetics in contributing to the social setting. Wilderness designation would limit restoration options for these stands. Manipulations would only be considered in order to protect the composite wilderness resource, and only as a last resort to preserve naturalness at the expense of trammeling.

The Wenatchee Service Center has analyzed data produced by the 2007 aerial survey in order to provide land managers with a summary of forest insect activity in particular areas. Aerial survey information can give a valuable overview of recent tree damage and damaging agents at the time of the flight. Note that trees identified as killed by bark beetles

generally were attacked in the summer of 2006 or spring of 2007. It takes several months for the crown of a beetle-killed tree to lose its green color. The speed of the color change depends on the condition of the tree at the time of attack

The most extensive damaging agent is fir engraver in grand fir. About 4,500 acres were mapped throughout Tieton. The largest pockets were southeast of the Tieton River, in the Blue Slide area. This high level of activity can be attributed to repeated defoliation of grand firs by western spruce budworm.

Extensive areas of Douglas-fir beetle damage to Douglas-firs were reported. About 3,000 acres were mapped. The largest pockets were southeast of the Tieton River, same areas where fir engraver was mapped. This can also be attributed to repeated defoliation of Douglas-firs by western spruce budworm.

An estimated 45,000 lodgepole pines were reported killed by mountain pine beetles. Pockets ranging in size from 12 to 600 acres were mapped throughout the analysis area, for a total of about 4,000 acres. Twelve pockets of damage to whitebark pines were mapped. Whitebark pine mortality due to mountain pine beetles has been increasing in many places, due to the combined effects of white pine blister rust and generally warmer winter temperatures (Gibson et al 2008). Pockets of beetle-killed whitebark pines were mapped around all of the potential wilderness areas.

Western spruce budworm is still active in the analysis area. About 5,000 acres of defoliation were mapped. Defoliation was reported in all of the potential wilderness areas.

Western balsam bark beetle activity was mapped on about 1,000 acres. Western balsam bark beetle attacks subalpine firs that are stressed by drought or other damage. Western balsam bark beetles are thought to build up high populations in subalpine fir blowdown (McMillin et al 2001). When beetle populations are high, they can more easily attack and kill healthy trees. Removing blowdown may be a way of reducing tree-killing by these beetles.

Decline of subalpine fir has been noted in many places in eastern Washington. Some of the damage attributed to western balsam bark beetles or balsam woolly adelgids has been caused by other agents, including *Pityoktines minutus* beetles and cytospora canker. Firs that have been stressed by factors such as drought or root disease become susceptible to secondary bark beetles and weak pathogens. Field verification may be necessary to determine the causes of subalpine fir decline and mortality.

Threatened, Endangered, and Sensitive Plant Species

The Blueslide PWA includes one sensitive plant species: clustered ladyslipper (*Cypripedium fasciculatum*).

Noxious Weeds

There are no surveyed noxious weed species within this PWA.

Minerals and Soils

The geology of this area is dominated by pre-Tertiary metavolcanic rocks and Oligocene sedimentary rocks, and along portions of the very eastern margin, basalt of the Miocene

Columbia River Basalt group. The area also includes some tertiary intrusive rocks. Landslide or mudflow deposits of recent age dominate much of the landscape. The area has not been investigated extensively by the U.S. Geological Survey (USGS) or U.S. Bureau of Mines, but USGS data indicate that the only reported mineral occurrence of interest has been bentonite, which is of poor quality. The southern part of the area is classified *prospectively valuable* for coal resources, the western portion of the area is classified as prospectively valuable for geothermal resources, and the northeast portion is classified prospectively valuable for oil and gas. The entire area is classified by the Bureau of Land Management as having moderate to high potential for occurrences of gas.

Bureau of Land Management mining claim recordation data (2/11/2005) indicates there have been no mining claims located within the area although there has been some historic prospecting in the past. During the 1980s, the area was leased for its oil and gas resources under five leases. All were terminated prior to their normal 10 year term. There are no pending lease applications and no recent expressions of interest.

Forty-seven percent of the soils have developed in basaltic materials, 30 percent granitic materials, 20 percent in pyroclastic materials, 2 percent in sandstone, and the remainder in alluvial materials. The basaltic, pyroclastic, and sandstone materials tend to become slippery and sticky with wet and easily compacted when moist. The granitic materials and the alluvium tend to be moderately coarse to coarse textured, so are generally not slippery or sticky when wet. They will compact, but not as easily as the former group.

Cultural and Heritage Resources

The Blue Slide unit encompasses a portion of a major travelway used by ancestors of the Yakama Indians to journey between their village sites in the Yakima and Naches basins to areas in the upper Tieton Basin. Relatively few archaeological surveys have been conducted in the area, but three lithic scatters, three talus pit sites, and one rock wall have already been documented. Considering the location of the unit and its proximity to the Yakama Reservation, Blue Slide has a high potential for additional archaeological sites. Historically, the unit was heavily used for sheep and cattle grazing. The documented remains of an historic corral on Short and Dirty Ridges are likely associated with this use. Cabin remains in the Cold Creek and Grey Creek areas may indicate fur trapping use as well. In addition, there are two former lookout sites along the southern edge of the unit (Darland Mountain 1925-1966 and Blue Slide 1946-1971), an existing lookout tower on Jumpoff Mountain (reconstructed 1961), and a Civilian Conservation Corps, Adirondack-style trail shelter at Long Lake. Further research and archaeological survey will undoubtedly augment the limited information currently available. Unless a site has been determined to be ineligible for the National Register, it is managed as a significant site until such a determination is made. Cultural sites are protected by law; however, a wilderness designation or a roadless designation would afford additional protection to cultural sites from ground disturbing activities.

Land Uses and Special Uses

There are no special land uses within the area.

Treaty Reserved Rights and Resources

The Blue Slide PWA falls entirely within lands ceded to the U.S. Government under the Yakama Treaty. Indian tribes hold rights reserved under treaty and recognized in statutes, executive orders and policies. Generally, these include rights to fish at usual and accustomed grounds and stations, the right to hunt and gather on open and unclaimed lands, the right to erect temporary houses to cure fish, and the right to pasture horses and cattle on open and unclaimed lands.

Private Lands

There are approximately 1,124 acres of private land adjacent to the area. The largest acreage belongs to Burlington Northern Railroad Company and approximately half a section is owned by Ahtanum Irrigation.

NEED FOR WILDERNESS

Location and size of other wildernesses in the general vicinity, and distance from proposed area and population centers:

This area is located east of the Goat Rocks Wilderness (107,018) and south of the William O. Douglas Wilderness (168,232). These wildernesses are about a three hour drive from the Puget Sound area. The area also borders the Yakama Indian Reservation and Washington State Department of Natural Resources lands to the south.

In ranking this PWA for its potential to provide a high quality wilderness recreation setting it ranked as low. It is not contiguous with existing wilderness. The existing 4x4 trail system is so steep that it would not accommodate hiker or equestrian use in its current condition. It should be noted, however, that the Blue Slide PWA has fine examples of columnar basalt, even though it is not mapped as part of the Columbia Basin Ecoregion.

Present visitor pressure on other wildernesses and trends, and changing patterns of use:

Overall, use pressure in the nearby wildernesses is moderate with some popular high use areas within the wildernesses at site specific locations. The trend is for moderate use increasing over time. While the majority of wilderness use is by hikers/backpackers, stock use remains a relatively important component of total use.

Extent to which non-wilderness lands provide opportunities for unconfined outdoor recreation experiences:

There is extensive motorized use of the area with an extensive network of 4x4 trails. Big game hunting is also popular.

The Okanogan-Wenatchee National Forest provides varied roadless areas that are not designated wilderness. Some portions of these areas allow motorized use, whereas other areas are non-motorized. Other inventoried potential wilderness areas in the vicinity that provide good opportunities for unconfined recreation include Goat Rock Adjacent and Bethel Ridge.

The need to provide a sanctuary for those biotic species that have demonstrated an inability to survive in less than primitive surroundings or the need for a protected area for other unique scientific value or phenomena:

Wildlife

This area provides habitat for a number of species that require primitive surroundings including peregrine falcon, gray wolves, and wolverines. Preservation of the area as wilderness would contribute to providing sanctuary for these species. Habitat for northern spotted owls will also need to be protected along with nest sites for the northern spotted owl; however the owl habitat in dry and mesic forest may require future mechanical treatment in order to preserve sustainability.

Fish

Fish species that would benefit from wilderness designation include westslope cutthroat trout and bull trout.

Several native species in the interior Columbia River Basin have demonstrated an inability to survive in less than primitive surroundings, especially the bull trout. In addition to habitat changes on National Forest System lands, other factors off forest such as hydropower generation, hatchery programs, harvest, and changing ocean conditions further challenge the persistence of some far-ranging native species. Broad-scale assessments have demonstrated a positive correlation between unroaded areas and persisting native fish stocks. Often, assessments like these don't differentiate between wilderness and roadless areas; rather they combine the two into an "unroaded" category. These assessments show current strongholds (most secure and robust populations) are dependant on wilderness and roadless areas. Some of the more resilient native fish populations in the Interior Columbia Basin are located in unroaded areas on National Forest System lands.

For the Okanogan-Wenatchee National Forest, PWAs were assigned an aquatic ranking based on federally listed and sensitive fish species that are sensitive to human disturbances. A high ranking was assigned when listed fish species occur in the PWA or when ecological process including high quality water help sustain listed fish species downstream of the PWA. All other PWAs are ranked low. This PWA is assigned a high ranking based on these factors

Rare Plant Species

An analysis was completed to prioritize which PWAs would contribute the most to providing refugia for those plant species on the species of interest/species of concern (SOI/SOC) list. The analysis ranked three factors. The first factor, the total number of sites occurring within the PWA, ranked as low for this PWA. The second factor, which also ranked as low for this PWA, examined the degree of rarity of any SOI/SOC species present, and also recognized the importance of individual PWAs in supporting a high incidence of populations relative to Washington state as a whole.

PWAs are generally unsurveyed for rare plants due to a relative lack of projects occurring in these areas. Thus an additional factor examined the potential for the PWA to support SOI/SOC species. Based on databases, first the SOI/SOC plant species were identified that

are present within a five-mile radius of the PWA, but are not known to occur within the PWA. Then the PWA was analyzed to see if the potential habitat for these species occurs within the PWA. Based on this analysis, this PWA ranks as low.

Finally, a composite score was assigned to each PWA based on combining each of the rankings described above. This PWA ranks overall as low priority for preserving rare plant refugia with a wilderness designation.

Ability to provide for preservation of identifiable landform types and ecosystems:

This area represents the East Cascades Ecoregion. This ecoregion type is well-represented in existing wilderness lands in the Cascade Range.

An analysis compared vegetative cover types that are under-represented in wilderness on the National Forest System in Region 6 with those same cover types present in the PWA. Large-scale cover types were available through existing data layers and represent approximately 12 percent of the vegetative cover of this PWA (approximately 1,980 acres). These types include forb lands, non-alpine meadows, and alpine meadows. Taken as a whole, the contribution of underrepresented vegetation types ranks as moderate for the portion of this area with underrepresented cover types, and also as moderate for the number of acres that are represented within this PWA relative to the other PWAs in the planning area.

Some under-represented cover types fill microhabitats such as riparian areas or perched water tables. Quaking aspen and cottonwood are underrepresented in wilderness regionally. Such finer scale cover types are not represented in this PWA.

In particular, the non-alpine meadow cover type, which comprises approximately 1,530 acres in this PWA, would make a significant contribution within the eastern Washington planning area.